

CLAIMS

I claim:

1. A medicament for the treatment of open wounds, the medicament comprising super-oxidized water based on hypochlorous acid.

2. The medicament according to claim 1, wherein the super-oxidized water is in liquid form for application to the wound by bathing or spraying.

3. The medicament according to claim 1, wherein the super-oxidized water is in gel form for topical application to the wound.

4. The medicament according to claim 1, wherein the super-oxidized water or a preparation derived therefrom has a pH of 4 to 7.

5. The medicament according to claim 4, wherein the pH is in a range of about 4.0 to 6.5.

6. The medicament according to claim 5, wherein the pH is in a range of about 4.0 to 6.2.

7. The medicament according to claim 6, wherein the pH is in a range of about 4.3 to 6.2.

8. The medicament according to claim 7, wherein the pH is about 5.4.

9. The medicament according to claim 1, wherein the super-oxidized water has a redox potential of >950mV.

10. The medicament according to claim 9, wherein the super-oxidized water has a redox potential of about 1000mV.

11. The medicament according to claim 1, wherein the super-oxidized water or a preparation derived therefrom has a biocide rate (D Value) of approximately 1 log reduction unit of bacillus subtilis spores in less than 1 minute with a 9:1 super-oxidized water: innoculum mix.

12. The medicament according to claim 1, wherein the super-oxidized water is diluted to an extent that it does not inhibit cell proliferation in use.

13. The medicament according to claim 12, wherein the super-oxidized water is diluted to an extent that it promotes cell proliferation in use.

14. The medicament according to claim 1, wherein the super-oxidized water comprises an output solution obtained by electrochemical treatment of a saline solution.

5 15. The medicament according to claim 14, wherein the super-oxidized water has a pH adjusted to a desired level by using an alkaline solution output from an electrochemical cell in which the saline solution is treated.

16. The medicament according to claim 14, wherein the output solution further comprises a phosphate buffer to adjust a pH of the solution to a desired level.

10 17. A super-oxidized water based on hypochlorous acid for use in treatment of a human or animal body.

18. The super-oxidized water according to claim 17 having a pH of 4 to 7.

19. The super-oxidized water according to claim 18 having a pH in a range of about 4.0 to 6.5.

15 20. The super-oxidized water according to claim 19 having a pH in a range of about 4.0 to 6.2.

21. The super-oxidized water according to claim 20 having a pH in a range of about 4.3 to 6.2.

22. The super-oxidized water according to claim 21 having a pH of about 5.4.

20 23. The super-oxidized water according to claim 17, having a redox potential of >950mV.

24. The super-oxidized water according to claim 23 having a redox potential of about 1000mV.

25 25. The super-oxidized water according to claim 17, having a biocide rate (D Value) of approximately 1 log unit reduction of bacillus subtilis spores in less than 1 minute with a 9:1 super-oxidized water: innoculum mix.

26. A method for treatment of a human or animal body, comprising administering to the human or animal body a super-oxidized water based on hypochlorous acid.

27. The method according to claim 26, comprising administering super-oxidized water as a medicament for treatment of leg ulcers or other open wounds.

28. The method according to claim 26, comprising administering the super-oxidized water as a medicament for controlling microbial population and permitting cell growth.

29. The method according to claim 26, wherein the super-oxidized water or a preparation derived therefrom has a pH of 4 to 7, a redox potential of >950mV, and a biocide rate (D Value) of approximately 1 log unit reduction of bacillus subtilis spores in less than 1 minute with a 9:1 super-oxidized water: innoculum mi.

30. A method of preparing a medicament according to 1, comprising passing a saline solution through an electrochemical cell having electrodes separated by a semipermeable membrane, operating the cell in such manner as to produce super-oxidized water based on hypochlorous acid, and incorporating the super-oxidized water in a carrier preparation at a sufficient concentration to impart biocidal properties and allow cell proliferation when applied to a human or animal body.

31. The method according to claim 30, further comprising controlling a pH of the super-oxidized water generated in the cell by a buffering action within the cell involving re-feeding alkaline solution also generated in the cell.

32. A method of treating a leg ulcer or other open wound on a human or animal body, comprising applying to the wound a medicament according to claim 1.

33. The method according to claim 32, wherein the step of applying the medicament comprises immersing the wound in a hydrobath containing the medicament.

34. A hydrobath preparation for the treatment of leg ulcers or other open wounds comprising super-oxidized water based on hypochlorous acid.